April 22, 2018

Via FCC Electronic Comment Filing System

Marlene H. Dortch
Office of the Secretary
Federal Communications Commission
445 12th Street SW, Room TW-A325
Washington, DC 20554

Re: Test waiver request for Minnesota WEA/EAS (PS Docket No. 15-91).

Dear Marlene H. Dortch:

I would like to comment on the State of Minnesota Wireless Emergency Alert/Emergency Alert System test waiver request for June 18, 2018.

I support state and local jurisdictions conducting drills and exercises using public alert and warning systems. Drills and exercises improve the confidence and proficiency of alert originators using alert systems. The public has demonstrated tolerance for rare tests, and do not panic even when alerting mistakes happen. However, live-code EAS/WEA exercises have caused confusion in both the public and other emergency responders as more local jurisdictions start conducting "live-code" exercises. Unlike the State of Minnesota, some local jurisdictions have not requested a waiver from the Federal Communications Commission or coordinated with Federal Emergency Management Agency before attempting live-code EAS/WEA exercises.

I support granting the EAS/WEA waiver for the State of Minnesota test. But, I suggest the Commission take this opportunity improve testing practices by local jurisdictions conducting public exercises with live-codes using both EAS and WEA.

If you have any questions concerning these comments, please do not hesitate to call (703-892-1810) or email (sean@donelan.com) me.

Respectfully submitted,

Sean Donelan

Enclosure

Re: Test waiver request for Minnesota WEA/EAS (PS Docket No. 15-91).

1. Choice of Event Codes for Live-Code Exercises

Although the content of the message will emphasize it is a test, and the event code may not be relevant to the purpose of the exercise, each EAS, IPAWS and WEA parameter must be chosen with care.

Unless there is specific justification to use a live event code, local jurisdictions should use test (RWT), practice (DMO) or administrative (ADR) event codes for drills and exercises. The Required Monthly Test (RMT) is frequently used in coordination with the industry emergency communications committees (SECC or LECC) for regional or statewide exercises. Using test codes, and ensuring the message repeatedly emphasizes it's a test, reduces public confusion when an alert message accidently reaches the public. Because IPAWS does not forward messages using test event codes to the Wireless Emergency Alert dissemination channel, local jurisdictions want to use a live-code to active WEA.

In most cases, local jurisdictions choose a specific event code for live-code exercises based on the purpose of the exercise. For example, during severe storm month, local officials in coordination with the National Weather Service often use the tornado (TOR) code or tsunami (TSW) event codes. Likewise, FEMA in coordination with the FCC used the Emergency Action Notification (EAN) event code as part of its 2011 national test.

When a live-code exercise is desired, but there is no requirement for a specific event code, local jurisdictions should choose the least severe event available. The Commission does not provide any guidance on the use of state/local event codes, but the National Weather Service has published some guidance. NOAA/NWS describes Civil Danger Warning (CDW) as the most severe event code available for state/local civil authority use.

When there isn't justification to use a specific event code, instead of using the most severe event codes, a low severity event codes such as Child Abduction Emergency (CAE), Civil Emergency Message (CEM), and Local Area Emergency (LAE) should be used for local public exercises. If something unexpected happens during the exercise, such as a partial message dissemination, less severe event codes are less likely to cause public worry.

2. Pre-Testing with IPAWS Test Lab or Vendor Test Lab

Because there is a lot of variability how alert origination software prepare IPAWS alerts, and how individual alert dissemination channels process IPAWS alerts, local jurisdictions should rehearse exercise scenarios with the IPAWS Test Lab or vendor test labs.

Several local jurisdictions have been surprised how their alert systems behaved the first time it was used during an actual emergency or exercise. They didn't expect their public alert to be distributed to a wide area or the resulting public message was different than expected.

The State of Minnesota proposed exercise predicts the Emergency Alert System will display the warning message as follows:

> "This is a test of the Stevens County Emergency Alert System. If there had been an actual emergency further instructions would have followed, this is only a test. No action is required."

Emergency Alert System dissemination equipment prepends various default translations of the EAS codes as part of its visual display, such as:

> "A civil authority has issued A CIVIL DANGER WARNING for the following counties or areas: Stevens, MN; at 6:30 PM on JUN 18, 2018 Effective until 7:30 PM. Message from MN HSEM. This is a test of the Stevens County Emergency Alert System. If there had been an actual emergency further instructions would have followed, this is only a test. No action is required."

When an EAS participant receives the message using over-the-air protocols or if the alert originator does not include text parameters, only the EAS header translation will display, such as:

> "A civil authority has issued A CIVIL DANGER WARNING for the following counties or areas: Stevens, MN; at 6:30 PM on JUN 18, 2018 Effective until 7:30 PM. Message from MN HSEM."

If there is no attached audio file, or the EAS dissemination equipment does not retrieve the attached audio file, it may use text-to-speech based on the EAS visual display text including the EAS header translations.

Likewise, the State of Minnesota proposed Wireless Emergency Alert will display the warning message as follows:

> "This is a test of the Stevens County Emergency Alert System. No action is required."

When the CMAStext parameter is included by the alert origination software in IPAWS WEA messages, the text replaces the default WEA message. However, local jurisdictions and alert origination software have had usability challenges with IPAWS tools. When the CMAStext is not included, the alert message is still transmitted with a default generated text based on the EAS event code, CAP response type field, and expiration time. The default WEA message, if a mistake happens creating the IPAWS message, would look similar to:

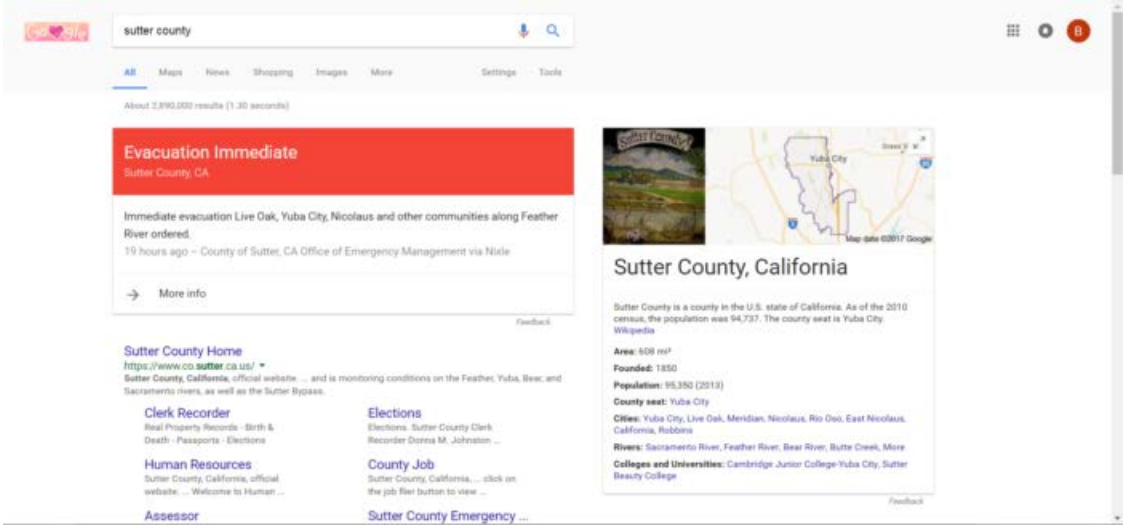
> "Civil Danger Warning in this area until 7:00PM CDT Monitor Radio or TV MN HSEM"

The State of Minnesota reports the local jurisdictions have conducted pre-exercise rehearsals with the JITC Lab to get familiar with their alerting systems.

3. Alerts are distributed to public/internet channels

IPAWS also distributes actual and test alerts to internet dissemination channels. While less well-known to emergency managers, alerts are forwarded to Google search engine results and social media timelines. For example, the Oroville dam evacuation alert in California was displayed at

the top of the search results about the area even though local emergency managers did not use EAS.



Even if local jurisdictions expect an alert to be restricted to a small geographic area, alerts will be distributed through many platforms with worldwide reach. Emergency managers should compose alert messages knowing they will be distributed widely by the public. The contents of exercise public alert messages should avoid actual emergency language.

Extreme realism is not necessary for public alert test messages. All parts of a test alert message should be clear it's a test. During severe weather month drills, the National Weather Service emphasizes it is only a drill repeatedly, throughout the entire message.